General Signal Notes

- 1. All signal items must be shown on at least one plan, using City of Seattle standard plans symbology. For research help call Darlene Pahlman at 684 5105. (Or insert project engineer name)
- 2. Any signal items, including but not limited to signal heads, pole foundations, pedestals, detector loops, conduits, hand holes, and associated span wires and cables that are damaged or destroyed shall be replaced at the contractor's expense.
- 3. Any signal items which are disturbed as a result of grade change are required to be regraded at the contractor's expense.
- 4. All work necessary to adjust, relocate, repair or construct any part of the signal utility shall be at the contractor's expense. This work is to be performed by SED crews or a qualified signal contractor.
- 5. Access to controller cabinets and associated signal equipment must be available at all times. Space must be provided for door swing. Any fences, equipment and material storage shall not block access to signal equipment. Any costs and/or time loss incurred by SED crews in gaining access to blocked signal equipment will be at the contractor's expense.
- 6. Any excavation in proximity to an existing pole or down guy must be done without undermining their stability.
- 7. The contractor shall investigate for underground utilities prior to any pole foundation excavation or conduit trenching to avoid damage to any underground utilities (including side sewers).
- 8. All pole installations shall be inspected at several stages; including but not limited to foundation excavation, bolt, rebar and conduit installations, pole set for proper rake, luminaire installations, wiring, grounding and bonding. To order inspection call Rick McMahan at 694 7621. Three working days notice is required.
- 9. Any conflicts with the signal system and construction sequence must be coordinated with the Signal Operations office. Contact Darlene Pahlman at 684-5105. A five working-day notice is required for any work requested of traffic signal electrician crews.
- 10. Contractor shall maintain existing signal operation during construction and provide temporary relocation of existing traffic signal equipment and wiring if necessary (approved by the Engineer) at the contractor's expense.

- 11. The contractor shall verify the existing signal phasing sequence diagram at each intersection prior to construction of any signal modifications or new installations.
- 12. An insulated #8 ground wire shall be installed in all conduits unless a ground wire is already present in an existing conduit. The intersection and street lighting must be bonded and grounded per spec. including handhole lids and frames.
- 13. Conduit shall be PVC Schedule 80.
- 14. Prior to sidewalk placement all conduits (existing and newly installed) must be inspected for continuity. This means in the new conduits pull strings should be present. All the existing conduit must be; accounted for, clear of debris, extended above the bottom of the handhole or terminated in the side and have movement in the cables or a pull string available to show movement. All conduits that are abandoned shall be labeled such in each access they pass through. To order inspection call Rick McMahan at 694 7621. Three working days notice is required.
- 15. The contractor shall verify the capacities of all existing conduits or duct runs designated for use on this project. Any discrepancies with the plans shall be brought to the attention of the engineer prior to any construction work.
- 16. Work shall be scheduled such that no two (2) adjacent or opposite street lights are disabled at any one time.
 - Existing street light service disconnection and final street light service connection shall be made by Seattle City Light. Contact Norma Clark at 386-9163, five (5) working days in advance. This wiring shall require inspection before a request for hook up can be made. Call Rick McMahan at 684 7621.
- 17. Existing signs which are removed (street name signs, signal signs, etc.) from an existing pole shall be reinstalled per plan or adjusted in the field with the Engineer's approval.
- 18. Any paving/ sidewalk cuts or removals passing through a signalized intersection with traffic loop detectors must do the following procedure. Two weeks prior to damaging a detector loop, contact signal operations with a final plan. An estimate of damage and cost will be given to the contractor. Temporary timing, disconnection, detector testing and restoration of permanent timing are an exclusive task for signal operations electricians. Restoration of the detector loops is the responsibility of the contractor with an approved design from signal operations. If signal crews have the labor time available they can be paid to restore the detectors. If the signal crews are unavailable, it will be the responsibility of the contract to restore the detector loops within 2 weeks of destruction. The permanent paving must be in place before the loops can be restored. No more than 2 intersections with loops destroyed are allowed at any one time. Temporary timing will not be scheduled until a deposit for the full estimate of signal operations time is received.

Disconnect and temporary timing will be scheduled 5 working days after receipt of the deposit. Signal operations personnel will work on a time and material basis. Any moneys unused at the end of the project will be refunded. No detectors may be cut until this procedure is satisfied

19. All materials used shall go through the submittal process outlined in the standard specifications. If vehicle signal heads and or pedestrian heads are in the contract the submittal also must include a sample to the signal shop. This applies to permalites also. Clearly label your sample with the project name and the company and contact phone number. Call Rosemary Bachmann at 386 1517 the day before to arrange delivery.